

RAW SEQUENCE LISTING

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Application Serial Number: 10/591,484
Source: IFWP
Date Processed by STIC: 9/18/06

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IFWP

RAW SEQUENCE LISTING

DATE: 09/18/2006

PATENT APPLICATION: US/10/591,484

TIME: 15:21:52

Input Set : E:\ARCD405US.txt

Output Set: N:\CRF4\09182006\J591484.raw

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3 <110> APPLICANT: RATAIN, MARK J.
4      INNOCENTI, FEDERICO
5      KROETZ, DEANNA L.
6      UNDEVIA, SAMIR
7      NYUGEN, TAN
8      LIU, WANQING
10 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO THE
11      PHARMACOGENETICS OF DIFFERENT GENE VARIANTS
13 <130> FILE REFERENCE: ARCD:405US
14 <140> CURRENT APPLICATION NUMBER: US/10/591,484
16 <141> CURRENT FILING DATE: 2006-09-01
18 <150> PRIOR APPLICATION NUMBER: PCT/US2005/007410
19 <151> PRIOR FILING DATE: 2005-03-07
21 <150> PRIOR APPLICATION NUMBER: 60/550,268
22 <151> PRIOR FILING DATE: 2004-03-05
24 <160> NUMBER OF SEQ ID NOS: 11
26 <170> SOFTWARE: PatentIn Ver. 2.1
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 4868
30 <212> TYPE: DNA
31 <213> ORGANISM: Homo sapiens
33 <220> FEATURE:
34 <221> NAME/KEY: CDS
35 <222> LOCATION: (38)..(4675)
37 <400> SEQUENCE: 1
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39                               Met Leu Glu Lys Phe Cys
40                               1           5
42 aac tct act ttt tgg aat tcc tca ttc ctg gac agt ccg gag gca gac 103
43 Asn Ser Thr Phe Trp Asn Ser Ser Phe Leu Asp Ser Pro Glu Ala Asp
44           10           15           20
46 ctg cca ctt tgt ttt gag caa act gtt ctg gtg tgg att ccc ttg ggc 151
47 Leu Pro Leu Cys Phe Glu Gln Thr Val Leu Val Trp Ile Pro Leu Gly
48           25           30           35
50 ttc cta tgg ctc ctg gcc ccc tgg cag ctt ctc cac gtg tat aaa tcc 199
51 Phe Leu Trp Leu Leu Ala Pro Trp Gln Leu Leu His Val Tyr Lys Ser
52           40           45           50
54 agg acc aag aga tcc tct acc acc aaa ctc tat ctt gct aag cag gta 247
55 Arg Thr Lys Arg Ser Ser Thr Thr Lys Leu Tyr Leu Ala Lys Gln Val
56 55           60           65           70
58 ttc gtt ggt ttt ctt ctt att cta gca gcc ata gag ctg gcc ctt gta 295
59 Phe Val Gly Phe Leu Leu Ile Leu Ala Ala Ile Glu Leu Ala Leu Val
60           75           80           85

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62 ctc aca gaa gac tct gga caa gcc aca gtc cct gct gtt cga tat acc 343
63 Leu Thr Glu Asp Ser Gly Gln Ala Thr Val Pro Ala Val Arg Tyr Thr
64          90          95          100
66 aat cca agc ctc tac cta ggc aca tgg ctc ctg gtt ttg ctg atc caa 391
67 Asn Pro Ser Leu Tyr Leu Gly Thr Trp Leu Leu Val Leu Leu Ile Gln
68          105          110          115
70 tac agc aga caa tgg tgt gta cag aaa aac tcc tgg ttc ctg tcc cta 439
71 Tyr Ser Arg Gln Trp Cys Val Gln Lys Asn Ser Trp Phe Leu Ser Leu
72          120          125          130
74 ttc tgg att ctc tcg ata ctc tgt ggc act ttc caa ttt cag act ctg 487
75 Phe Trp Ile Leu Ser Ile Leu Cys Gly Thr Phe Gln Phe Gln Thr Leu
76 135          140          145          150
78 atc cgg aca ctc tta cag ggt gac aat tct aat cta gcc tac tcc tgc 535
79 Ile Arg Thr Leu Leu Gln Gly Asp Asn Ser Asn Leu Ala Tyr Ser Cys
80          155          160          165
82 ctg ttc ttc atc tcc tac gga ttc cag atc ctg atc ctg atc ttt tca 583
83 Leu Phe Phe Ile Ser Tyr Gly Phe Gln Ile Leu Ile Leu Ile Phe Ser
84          170          175          180
86 gca ttt tca gaa gaa aat gag tca tca aat aat cca tca tcc ata gct 631
87 Ala Phe Ser Glu Asn Asn Glu Ser Ser Asn Asn Pro Ser Ser Ile Ala
88          185          190          195
90 tca ttc ctg agt agc att acc tac agc tgg tat gac agc atc att ctg 679
91 Ser Phe Leu Ser Ser Ile Thr Tyr Ser Trp Tyr Asp Ser Ile Ile Leu
92          200          205          210
94 aaa ggc tac aag cgt cct ctg aca ctc gag gat gtc tgg gaa gtt gat 727
95 Lys Gly Tyr Lys Arg Pro Leu Thr Leu Glu Asp Val Trp Glu Val Asp
96 215          220          225          230
98 gaa gag atg aaa acc aag aca tta gtg agc aag ttt gaa acg cac atg 775
99 Glu Glu Met Lys Thr Lys Thr Leu Val Ser Lys Phe Glu Thr His Met
100          235          240          245
102 aag aga gag ctg cag aaa gcc agg cgg gca ctc cag aga cgg cag gag 823
103 Lys Arg Glu Leu Gln Lys Ala Arg Arg Ala Leu Gln Arg Arg Gln Glu
104          250          255          260
106 aag agc tcc cag cag aac tct gga gcc agg ctg cct ggc ttg aac aag 871
107 Lys Ser Ser Gln Gln Asn Ser Gly Ala Arg Leu Pro Gly Leu Asn Lys
108          265          270          275
110 aat cag agt caa agc caa gat gcc ctt gtc ctg gaa gat gtt gaa aag 919
111 Asn Gln Ser Gln Ser Gln Asp Ala Leu Val Leu Glu Asp Val Glu Lys
112          280          285          290
114 aaa aaa aag aag tct ggg acc aaa aaa gat gtt cca aaa tcc tgg ttg 967
115 Lys Lys Lys Lys Ser Gly Thr Lys Lys Asp Val Pro Lys Ser Trp Leu
116 295          300          305          310
118 atg aag gct ctg ttc aaa act ttc tac atg gtg ctc ctg aaa tca ttc 1015
119 Met Lys Ala Leu Phe Lys Thr Phe Tyr Met Val Leu Leu Lys Ser Phe
120          315          320          325
122 cta ctg aag cta gtg aat gac atc ttc acg ttt gtg agt cct cag ctg 1063
123 Leu Leu Lys Leu Val Asn Asp Ile Phe Thr Phe Val Ser Pro Gln Leu
124          330          335          340
126 ctg aaa ttg ctg atc tcc ttt gca agt gac cgt gac aca tat ttg tgg 1111

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128			345					350					355				
130	att	gga	tat	ctc	tgt	gca	atc	ctc	tta	ttc	act	gcg	gct	ctc	att	cag	1159
131	Ile	Gly	Tyr	Leu	Cys	Ala	Ile	Leu	Leu	Phe	Thr	Ala	Ala	Leu	Ile	Gln	
132		360					365					370					
134	tct	ttc	tgc	ctt	cag	tgt	tat	ttc	caa	ctg	tgc	ttc	aag	ctg	ggt	gta	1207
135	Ser	Phe	Cys	Leu	Gln	Cys	Tyr	Phe	Gln	Leu	Cys	Phe	Lys	Leu	Gly	Val	
136	375					380				385						390	
138	aaa	gta	cgg	aca	gct	atc	atg	gct	tct	gta	tat	aag	aag	gca	ttg	acc	1255
139	Lys	Val	Arg	Thr	Ala	Ile	Met	Ala	Ser	Val	Tyr	Lys	Lys	Ala	Leu	Thr	
140				395						400					405		
142	cta	tcc	aac	ttg	gcc	agg	aag	gag	tac	acc	gtt	gga	gaa	aca	gtg	aac	1303
143	Leu	Ser	Asn	Leu	Ala	Arg	Lys	Glu	Tyr	Thr	Val	Gly	Glu	Thr	Val	Asn	
144			410					415					420				
146	ctg	atg	tct	gtg	gat	gcc	cag	aag	ctc	atg	gat	gtg	acc	aac	ttc	atg	1351
147	Leu	Met	Ser	Val	Asp	Ala	Gln	Lys	Leu	Met	Asp	Val	Thr	Asn	Phe	Met	
148		425					430					435					
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151	His	Met	Leu	Trp	Ser	Ser	Val	Leu	Gln	Ile	Val	Leu	Ser	Ile	Phe	Phe	
152		440					445					450					
154	cta	tgg	aga	gag	ttg	gga	ccc	tca	gtc	tta	gca	ggt	gtt	ggg	gtg	atg	1447
155	Leu	Trp	Arg	Glu	Leu	Gly	Pro	Ser	Val	Leu	Ala	Gly	Val	Gly	Val	Met	
156	455					460				465						470	
158	gtg	ctt	gta	atc	cca	att	aat	gcg	ata	ctg	tcc	acc	aag	agt	aag	acc	1495
159	Val	Leu	Val	Ile	Pro	Ile	Asn	Ala	Ile	Leu	Ser	Thr	Lys	Ser	Lys	Thr	
160				475				480					485				
162	att	cag	gtc	aaa	aat	atg	aag	aat	aaa	gac	aaa	cgt	tta	aag	atc	atg	1543
163	Ile	Gln	Val	Lys	Asn	Met	Lys	Asn	Lys	Asp	Lys	Arg	Leu	Lys	Ile	Met	
164			490					495					500				
166	aat	gag	att	ctt	agt	gga	atc	aag	atc	ctg	aaa	tat	ttt	gcc	tgg	gaa	1591
167	Asn	Glu	Ile	Leu	Ser	Gly	Ile	Lys	Ile	Leu	Lys	Tyr	Phe	Ala	Trp	Glu	
168		505					510					515					
170	cct	tca	ttc	aga	gac	caa	gta	caa	aac	ctc	cgg	aag	aaa	gag	ctc	aag	1639
171	Pro	Ser	Phe	Arg	Asp	Gln	Val	Gln	Asn	Leu	Arg	Lys	Lys	Glu	Leu	Lys	
172		520					525					530					
174	aac	ctg	ctg	gcc	ttt	agt	caa	cta	cag	tgt	gta	gta	ata	ttc	gtc	ttc	1687
175	Asn	Leu	Leu	Ala	Phe	Ser	Gln	Leu	Gln	Cys	Val	Val	Ile	Phe	Val	Phe	
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178	cag	tta	act	cca	gtc	ctg	gta	tct	gtg	gtc	aca	ttt	tct	gtt	tat	gtc	1735
179	Gln	Leu	Thr	Pro	Val	Leu	Val	Ser	Val	Val	Thr	Phe	Ser	Val	Tyr	Val	
180				555				560					565				
182	ctg	gtg	gat	agc	aac	aat	att	ttg	gat	gca	caa	aag	gcc	ttc	acc	tcc	1783
183	Leu	Val	Asp	Ser	Asn	Asn	Ile	Leu	Asp	Ala	Gln	Lys	Ala	Phe	Thr	Ser	
184			570					575					580				
186	att	acc	ctc	ttc	aat	atc	ctg	cgc	ttt	ccc	ctg	agc	atg	ctt	ccc	atg	1831
187	Ile	Thr	Leu	Phe	Asn	Ile	Leu	Arg	Phe	Pro	Leu	Ser	Met	Leu	Pro	Met	
188		585					590					595					
190	atg	atc	tcc	tcc	atg	ctc	cag	gcc	agt	gtt	tcc	aca	gag	cgg	cta	gag	1879
191	Met	Ile	Ser	Ser	Met	Leu	Gln	Ala	Ser	Val	Ser	Thr	Glu	Arg	Leu	Glu	

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194	aag tac ttg gga ggg gat gac ttg gac aca tct gcc att cga cat gac	1927		
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196	615 620 625 630			
198	tgc aat ttt gac aaa gcc atg cag ttt tct gag gcc tcc ttt acc tgg	1975		
199	Cys Asn Phe Asp Lys Ala Met Gln Phe Ser Glu Ala Ser Phe Thr Trp			
200	635 640 645			
202	gaa cat gat tgc gaa gcc aca gtc cga gat gtg aac ctg gac att atg	2023		
203	Glu His Asp Ser Glu Ala Thr Val Arg Asp Val Asn Leu Asp Ile Met			
204	650 655 660			
206	gca ggc caa ctt gtg gct gtg ata ggc cct gtc ggc tct ggg aaa tcc	2071		
207	Ala Gly Gln Leu Val Ala Val Ile Gly Pro Val Gly Ser Gly Lys Ser			
208	665 670 675			
210	tcc ttg ata tca gcc atg ctg gga gaa atg gaa aat gtc cac ggg cac	2119		
211	Ser Leu Ile Ser Ala Met Leu Gly Glu Met Glu Asn Val His Gly His			
212	680 685 690			
214	atc acc atc aag ggc acc act gcc tat gtc cca cag cag tcc tgg att	2167		
215	Ile Thr Ile Lys Gly Thr Thr Ala Tyr Val Pro Gln Gln Ser Trp Ile			
216	695 700 705 710			
218	cag aat ggc acc ata aag gac aac atc ctt ttt gga aca gag ttt aat	2215		
219	Gln Asn Gly Thr Ile Lys Asp Asn Ile Leu Phe Gly Thr Glu Phe Asn			
220	715 720 725			
222	gaa aag agg tac cag caa gta ctg gag gcc tgt gct ctc ctc cca gac	2263		
223	Glu Lys Arg Tyr Gln Gln Val Leu Glu Ala Cys Ala Leu Leu Pro Asp			
224	730 735 740			
226	ttg gaa atg ctg cct gga gga gat ttg gct gag att gga gag aag ggt	2311		
227	Leu Glu Met Leu Pro Gly Gly Asp Leu Ala Glu Ile Gly Glu Lys Gly			
228	745 750 755			
230	ata aat ctt agt ggg ggt cag aag cag cgg atc agc ctg gcc aga gct	2359		
231	Ile Asn Leu Ser Gly Gly Gln Lys Gln Arg Ile Ser Leu Ala Arg Ala			
232	760 765 770			
234	acc tac caa aat tta gac atc tat ctt cta gat gac ccc ctg tct gca	2407		
235	Thr Tyr Gln Asn Leu Asp Ile Tyr Leu Leu Asp Asp Pro Leu Ser Ala			
236	775 780 785 790			
238	gtg gat gct cat gta gga aaa cat att ttt aat aag gtc ttg ggc ccc	2455		
239	Val Asp Ala His Val Gly Lys His Ile Phe Asn Lys Val Leu Gly Pro			
240	795 800 805			
242	aat ggc ctg ttg aaa ggc aag act cga ctc ttg gtt aca cat agc atg	2503		
243	Asn Gly Leu Leu Lys Gly Lys Thr Arg Leu Leu Val Thr His Ser Met			
244	810 815 820			
246	cac ttt ctt cct caa gtg gat gag att gta gtt ctg ggg aat gga aca	2551		
247	His Phe Leu Pro Gln Val Asp Glu Ile Val Val Leu Gly Asn Gly Thr			
248	825 830 835			
250	att gta gag aaa gga tcc tac agt gct ctc ctg gcc aaa aaa gga gag	2599		
251	Ile Val Glu Lys Gly Ser Tyr Ser Ala Leu Leu Ala Lys Lys Gly Glu			
252	840 845 850			
254	ttt gct aag aat ctg aag aca ttt cta aga cat aca ggc cct gaa gag	2647		
255	Phe Ala Lys Asn Leu Lys Thr Phe Leu Arg His Thr Gly Pro Glu Glu			
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262	ctg ata tcc agt gtg gaa gag atc ccc gaa gat gca gcc tcc ata acc	2743
263	Leu Ile Ser Ser Val Glu Glu Ile Pro Glu Asp Ala Ala Ser Ile Thr	
264	890 895 900	
266	atg aga aga gag aac agc ttt cgt cga aca ctt agc cgc agt ttt agg	2791
267	Met Arg Arg Glu Asn Ser Phe Arg Arg Thr Leu Ser Arg Ser Ser Arg	
268	905 910 915	
270	tcc aat ggc agg cat ctg aag tcc ctg aga aac tcc ttg aaa act cgg	2839
271	Ser Asn Gly Arg His Leu Lys Ser Leu Arg Asn Ser Leu Lys Thr Arg	
272	920 925 930	
274	aat gtg aat agc ctg aag gaa gac gaa gaa cta gtg aaa gga caa aaa	2887
275	Asn Val Asn Ser Leu Lys Glu Asp Glu Glu Leu Val Lys Gly Gln Lys	
276	935 940 945 950	
278	cta att aag aag gaa ttc ata gaa act gga aag gtg aag ttc tcc atc	2935
279	Leu Ile Lys Lys Glu Phe Ile Glu Thr Gly Lys Val Lys Phe Ser Ile	
280	955 960 965	
282	tac ctg gag tac cta caa gca ata gga ttg ttt tcg ata ttc ttc ttc	2983
283	Tyr Leu Glu Tyr Leu Gln Ala Ile Gly Leu Phe Ser Ile Phe Phe Ile	
284	970 975 980	
286	atc ctt gcg ttt gtg atg aat tct gtg gct ttt att gga tcc aac ctc	3031
287	Ile Leu Ala Phe Val Met Asn Ser Val Ala Phe Ile Gly Ser Asn Leu	
288	985 990 995	
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291	Trp Leu Ser Ala Trp Thr Ser Asp Ser Lys Ile Phe Asn Ser Thr Asp	
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294	tat cca gca tct cag agg gac atg aga gtt gga gtc tac gga gct ctg	3127
295	Tyr Pro Ala Ser Gln Arg Asp Met Arg Val Gly Val Tyr Gly Ala Leu	
296	1015 1020 1025 1030	
298	gga tta gcc caa ggt ata ttt gtg ttc ata gca cat ttc tgg agt gcc	3175
299	Gly Leu Ala Gln Gly Ile Phe Val Phe Ile Ala His Phe Trp Ser Ala	
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302	ttt ggt ttc gtc cat gca tca aat atc ttg cac aag caa ctg ctg aac	3223
303	Phe Gly Phe Val His Ala Ser Asn Ile Leu His Lys Gln Leu Leu Asn	
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306	aat atc ctt cga gca cct atg aga ttt ttt gac aca aca ccc aca ggc	3271
307	Asn Ile Leu Arg Ala Pro Met Arg Phe Phe Asp Thr Thr Pro Thr Gly	
308	1065 1070 1075	
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311	Arg Ile Val Asn Arg Phe Ala Gly Asp Ile Ser Thr Val Asp Asp Thr	
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315	Leu Pro Gln Ser Leu Arg Ser Trp Ile Thr Cys Phe Leu Gly Ile Ile	
316	1095 1100 1105 1110	
318	agc acc ctt gtc atg atc tgc atg gcc act cct gtc ttc acc atc atc	3415
319	Ser Thr Leu Val Met Ile Cys Met Ala Thr Pro Val Phe Thr Ile Ile	
320	1115 1120 1125	
322	gtc att cct ctt ggc att att tat gta tct gtt cag atg ttt tat gtg	3463

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L:15 M:270 C: Current Application Number differs, Replaced Current Application Number